

Vashon-Maury Island Community Council

Box 281

Vashon, Wa. 98070

October 12, 1983

Dr. Sam Milham
Epidemiology Section, MS ET-13
Washington Department of Social and Health Services
Olympia, WA. 98504

Dear Dr. Milham:

The Vashon community is extremely concerned about possible health effects resulting from Tacoma ASARCO smelter emissions. Your statements indicate that there is nothing to worry about; our personal experience indicate there are things to be concerned about.

For a moment if you will, put yourself in the position of a parent whose child may be registering urinary arsenic levels ten times normal (normal being a clean, rural environment.) You've observed apparent smelter fallout around your home, talked to people who had to move from the south end of the Island to remedy respiratory and gastrointestinal problems, and met people who were exposed to spills that resulted in serious health problems (not to mention the need to have their family car destroyed due to arsenic in the heating system.) You've read studies and listened to scientists who have confirmed increased rates of cancer, chromosomal aberrations, birth defects, spontaneous abortions and neurological problems among people exposed to the same pollutant in larger doses. You know that epidemiological studies can only detect major, widespread health effects. You know of people experiencing health problems that could well be due to smelter emissions (e.g., the gentleman with peripheal neuropathy at the October 6th Tacoma Dome meeting.)

However, Dr. Sam Milham, a leading researcher and presumably a conscientious public health official, repeatedly states "I haven't found any health problems. If health effects were there they would have shown up."

If you were in our shoes, I think you'd be studying Dr. Milham's work and asking questions too. Specifically, we would like to get your answers to the following questions:

1) In your study "Lung Cancer Mortality in a Community Surrounding a Copper Smelter", you found excessive lung cancer deaths in nearly every census tract in Tacoma and yet concluded "There is no evidence to indicate that lung cancer rates are elevated in the general area of the copper smelter." We disagree. Why didn't you compare lung cancers in Tacoma with Washington State rates rather than the higher U.S. rates? You would have discovered statistically significant excesses in nearly every category. This might indicate, as you have pointed out, how effective the stack is at dispersing emissions around the Tacoma area.

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2) In your followup study of children attending Ruston School in the early 1900's, a number of difficult research problems were encountered that reduced the valid sample size to 111; or to 55 if you dismiss those for whom no death certificate could be found. Confirmed exposure time was only three years. You found a mere 6% difference in survival rate over what a 1929 life expectancy table predicted and then concluded "It seems not likely that the elevated urinary arsenic levels reported among Ruston Elementary School children will be of any future health significance." Considering your devotion to statistical significance in the lung cancer study, it's remarkable that you could have arrived at such a strong conclusion from such weak data. Could you please explain this?

3) At the August 16, 1983 EPA workshop in Tacoma, you responded to a question of a young woman who had been exposed to arsenic during a spill (presumably the January 7, 1982 spill of a ton of arsenic over the roadway through the smelter.) She was pregnant at the time and her baby died a day after birth. She asked if there might be a connection between her arsenic exposure and the baby's death. Contradicting an EPA official, your response was "No.", and cited a Swedish study where there was no statistically significant relationship between spontaneous abortions in the community and distance from the smelter. We disagree. Swedish studies by Nordstöm, et. al. 1978, have shown that pregnant smelter workers have higher spontaneous abortion rates, lower birth weights of children, and a higher rate of birth abnormalities. In addition, one-time high doses of arsenic such as this woman may have been exposed to are more dangerous than continuous lower exposures. Could you explain your reasoning?

4) The PSAPCA meteorological curtailment program results in most of the ASARCO pollutants being dispersed in the direction of Vashon Island. Yet in the past ten years, only two DSHS urine tests and no epidemiological studies have been done here. A few children have shown arsenic levels as high as smelter workers. Children and unborn fetuses are the highest risk populations ... probably susceptible to effects at much lower doses than smelter workers (who are hardy survivors by definition.) Why hasn't a regular urine testing program and an analysis of cancer, birth defects, and other pertinent health effects been implemented on Vashon Island?

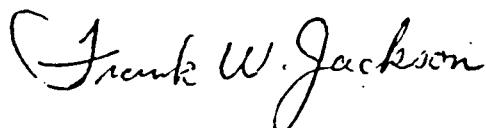
5) Considering the mobile population and the long latency period for arsenic-induced cancer (13-50 years), would not long-term case studies of health histories, (through Group Health medical records for example), be more enlightening than snapshot cohort studies?

6) At the October 6th Tacoma Dome meeting, Dr. Lincoln Polissar suggested identifying the statistical power of studies to show the relative certainty of the conclusions. Wouldn't that be a logical thing to do with your studies? Isn't it probable, even if not statistically certain, that certain sensitive individuals have experienced and will continue to experience significant health reactions to the smelter's toxic pollutants?

We would like to receive the best answers you can give to these questions by October 28th, as they may materially affect our approach to the November 2nd EPA hearing.

I hope you have empathy with our concern as parents to insure a clean, healthy environment. Granting that you are a respected, leading researcher in your field, it still makes us very uneasy to hear you so strongly dismiss the prospects of health problems resulting from smelter emissions. There is clearly another side to the story and during this period of examination of smelter emission controls, having an important public health official essentially advocating for the least stringent controls ... is unsettling. At least at the DSHS, the margin of safety should lie on the side of protecting public health; not on the side of protecting jobs.

Sincerely yours,

A handwritten signature in cursive script that reads "Frank W. Jackson". The signature is written in dark ink and is positioned above the typed name and title.

Frank W. Jackson
Environmental Committee Chairman
463-3729

cc: Dr. John Beare
Dr. Jack Allard